

Title (en)

Optical pumping method and unit for optical amplifiers

Title (de)

Verfahren und Vorrichtung zum optischem Pumpen bei optischen Verstärkern

Title (fr)

Procédé et dispositif de pompage optique pour amplificateurs optiques

Publication

**EP 1220383 A1 20020703 (EN)**

Application

**EP 00204828 A 20001227**

Priority

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Abstract (en)

Optical pumping unit (10) comprising a first pump source (11) adapted to emit a first pump radiation at wavelength  $\lambda_{p1}$ ; a second pump source (12) adapted to emit a second pump radiation at wavelength  $\lambda_{p2}$ , with wavelength  $\lambda_{p2}$  different from wavelength  $\lambda_{p1}$ ; and a common coupling section (20) comprising a first and a second port (21,22) connected to the first and second pump source (11,12) for respectively receiving the first and the second pump radiation; a third port (23) for a signal radiation at wavelength  $\lambda_s$ ; a fourth port (24), wherein said coupling section (20) is adapted to combine, in the fourth port (24), the signal radiation and the first and second pump radiation through a reversal of the direction of propagation of the first pump radiation from the first port (21) and to the fourth port (24). <IMAGE>

IPC 1-7

**H01S 3/094**; G02B 6/293

IPC 8 full level

**G02B 6/34** (2006.01); **H01S 3/094** (2006.01); **H01S 3/067** (2006.01)

CPC (source: EP)

**H01S 3/094003** (2013.01); **H01S 3/0637** (2013.01); **H01S 3/0675** (2013.01); **H01S 3/06754** (2013.01); **H01S 3/09408** (2013.01); **H01S 3/094096** (2013.01)

Citation (search report)

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- [A] EP 0707224 A1 19960417 - ALCATEL NV [NL]
- [A] US 5574807 A 19961112 - SNITZER ELIAS [US]

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